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NURSE MANAGERS' LEADER IDENTITY AND WORK ENGAGEMENT: CROSSOVER TO NURSES' JOB SATISFACTION

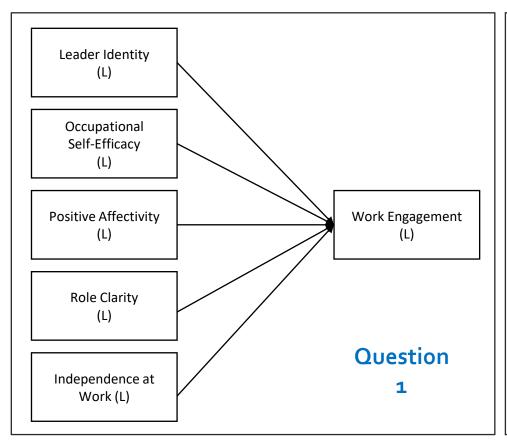
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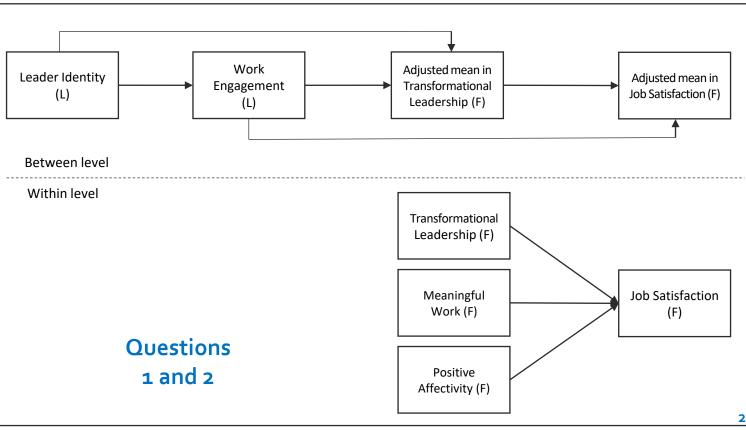
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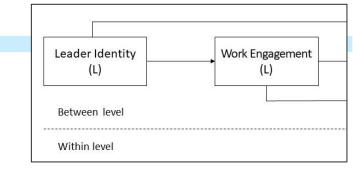
OUR QUESTIONS...

- 1) Does leader identity work as a personal resource for leaders that can foster their motivation at work?
- 2) Can the **crossover model** explain the influence that leaders have on their work teams' well-being at work? Specifically, can leader's **well-being** be transferred to their followers through the mediation of their perception of **transformational leadership**?





LEADER IDENTITY AS A PERSONAL RESOURCE **FOR LEADERS**



Leader identity is "the sub-component of one's identity that relates to being a leader or how one thinks of oneself as a leader" (Day & Harrison, 2007, p. 365).

- 1) It can be defined as a **positive identity** on the job (Dutton, Roberts, & Bednar, 2010) → <u>evalutative perspective</u>. Positive identities support the development of social resources + "motivate individuals to take actions that promote positive outcomes in organizations" (Dutton et al., 2010, p. 267).
- 2) Identity is a powerful "driver" for emotions, thoughts, attitudes and behaviors and it is a strong motivational incentive (Day & Harrison, 2007; Van Knippenberg, 2012) for "identity-congruent behaviors" (e.g., Oyserman, 2007; Shamir, 1991).

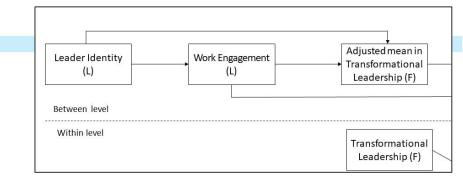
Personal resources (e.g., self-efficacy) are defined in the JD-R model/theory as "aspects of the self that are generally linked to resiliency and refer to individuals' sense of their ability to control and impact upon their environment successfully" (Hobfoll et al., 2003, in Xanthopoulou et al., 2007, pp. 123-124). These resources "can play a similar role as job resources" (Bakker & Demerouti, 2017, p. 275) by increasing one's motivation at work.

POINTS OF CONTACT: PERSONAL RESOURCES in the JD-R <-> LEADER IDENTITY

- They can (also) be defined as facets of the Self (concept)
- They support one's motivation
- They can develop social resources.

(Hp.1)

LEADER'S LEADER IDENTITY AS A RESOURCE (ALSO) FOR THE FOLLOWER



Considering that...:

- > the leader-follower relationship is an influence relationship (Hollander & Julian, 1969)
- > leader identity like other identities in general promotes identity-congruent behaviors (Oyserman, 2007)
- the leader's characteristics, including the leader's motivation (e.g., Barbuto, 2005), are among the antecedents of followers' perceptions linked to leadership (specifically linked to transformational leadership, see Tafvelin, 2013).

... we can hypothesize:

(Hp. 2) LEADER IDENTITY (L) > WORK ENGAGEMENT (L) > TRANSFORMATIONAL LEADERSHIP (F)

We expect work engagement to operate as a significant **mediator** in the relationship between leader identity and transformational leadership, capable of "enacting" leader identity through attitudes and behaviors that followers interpret and understand more easily \rightarrow engaged leaders.

Work Engagement (L) Adjusted mean in Transformational Leadership (F) Adjusted mean in Job Satisfaction (F)

CROSSOVER OF POSITIVE PSYCHOLOGICAL STATES FROM LEADERS TO FOLLOWERS (1)

The **crossover model** (Westman, 2001) describes an inter-individual process of exchange/transmission of emotions, experiences and resources, which can occur at the dyad, group or organizational level, between individuals working within the same social environment (Hobfoll et al., 2018).

Three processes:

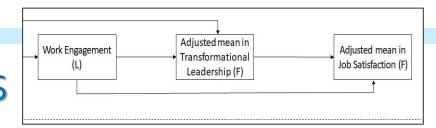
- direct: > empathy;
- indirect: > mediator;
- > **spurious**: > sharing of common stressors

Crossover in leadership has often analysed an indirect process through the use of **mediators** which focus on individual follower characteristics (Huang et al., 2016) or **leadership dimensions**, such as perceptions of the style and quality of the relationship:

- abusive supervision (Li et al., 2016)
- LMX (Gutermann et al., 2017).

In the literature, Crossover in leadership has often been studied on the negative side, i.e. considering the exchange of negative experiences and states, e.g. burnout (Ten Brummelhuis et al., 2014) and distress (Li et al., 2016); few studies investigated the positive side of crossover (e.g. Work Engagement; Gutermann et al., 2017).

CROSSOVER OF POSITIVE PSYCHOLOGICAL STATES FROM LEADERS TO FOLLOWERS (2)



Work Engagement is the most studied source of transfer in literature (cf. Hobfoll et al., 2018). Even in our model, it can be a «crucial determinant» of the crossover process, for many reasons:

- High arousal (Damen et al., 2008)
- Gain spiral (Hobfoll et al., 2018)

According to COR theory (Conservation of Resources Theory; Hobfoll, 1989; 2011; Hobfoll et al., 2018), individuals and groups are oriented to gain, maintain, protect and increase their resources.

The individual who experiences an increase in resources (> *engaged*):

- > enters a positive spiral of resource gain (gain spiral)
- > can transfer packs of resources (caravan)
- > enacts **positive behaviors** (e.g. those enacted by transformational leaders) in line with his/her positive experience.

Therefore, an **engaged leader** will be able to both **motivate** and make follower **satisfied** of their work, through transformational leadership behaviors (e.g. individualised consideration, intellectual stimulation).

(Hp. 3) WORK ENGAGEMENT > followers' TRASFORMATIONAL LEADERSHIP perceptions > JOB SATISFACTION

SAMPLE AND PROCEDURE

The sample consisted of 156 nurse managers and 1505 nurses (divided into 143 groups) working in 4 hospitals in Piedmont. All participants completed a self-report paper-and-pencil questionnaire.

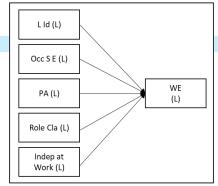
Socio-demographic Variables			LEADER (N=156) (Nurse managers)			FOLLOWER (N=1505; 143 groups) (Nurse)			
		N	%	M	SD	N	%	M	SD
Genre	W	134	84.3			1229	81.7		
Genie	М	25	15.7			259	17.2		
	Nursing School Diploma	122	76.7			781	51.9		
Educational level	Bachelor's Degree	12	7.5			633	42.1		
	Master's Degree	25	15.7			70	4.7		
Age				53.2	5.2			43.4	9.2
Length of employment				32.7	6.2			20.6	9.8
Tenure in the hospital				30.0	8.5			17.5	9.9
Tenure in the Leader role				38.0	12.9				
Tenure in the Ward								11.5	8.3

MEASURES

DIMENSION	REFERENCES	N° ITEMS	LIKERT SCALE	ALPHA	Regression	Multilevel Analysis
Leader identity (L*)	Hiller (2005)	4	7 points	.79	X	Χ
Work Engagement (L)	Schaufeli, Bakker, & Salanova (2006)	9	7 points	.92	X	Χ
Occupational Self-Efficacy (L)	Rigotti, Schyns, & Mohr (2008)	6	6 points	.85	X	
Role Clarity (L)	Pejtersen, Kristensen, Borg, & Bjorner (2010)	3	5 points	.76	X	
Independence at Work (L)	Van Veldhoven, Prins, Van der Laken, & Dijkstra (2015)	4	4 points	.80	X	
(state) Positive Affectivity (L-F)	Watson, Clark, & Tellegen (1988)	10	5 points	.88 (L) .89 (F)	X	X
Transformational Leadership (F*)	Carless, Wearing, & Mann (2000)	7	7 points	.97		X
Job Satisfaction (F)	Pejtersen, Kristensen, Borg, & Bjorner (2010)	5	5 points	.87		Χ
Meaningful Work (F)	Ashmos & Duchon (2000; items 1-2) Steger, Dik, & Duffy (2012; items 3-7)	7	7 points	.91		Χ

Results

CORRELATIONS: variables measured on 156 LEADERS



1. WE 4.10 (1.00) - 2. L. Id 5.05 (1.04) .38*** -	
2. L. Id 5.05 (1.04) .38***	
3. OccSE 4.93 (0.68) .41*** .33*** -	
4. PA 3.68 (0.64) .46*** .24** .33***	
5. RC 4.20 (0.67) .33*** .19* .25** .2	1* -
6. laW 3.45 (0.49) .29*** .14 .30*** .0	6 .36*** -

^{*} p < .05; ** p < .01; *** p < .001

Note. **WE** = Work Engagement; **L. Id** = Leader Identity; **OccSE** = Occupational Self-Efficacy; **PA** = Positive Affectivity; **RC** = Role Clarity; **IaW** = Independence at Work.

REGRESSION: LEADERS' Work Engagement

WE							
Step	Independent	Step 1	Step 2	Step 3			
Step	Variable	В	В	В			
4	OccSE	.29 ***	.21**	.16*			
1	PA	.37***	.35***	.33***			
2	RC		.15*	.13			
	laW		.15*	.14*			
3	L. Id			.20**			
	R ²	.29	.34	.38			
	Adjusted R ²	.28	.33	.36			
	ΔR^2	.29***	.05**	.04**			
* p < .05; ** p < .01; *** p < .001							

Nota. **WE** = Work Engagement; **L**. **Id** = Leader Identity; **OccSE** = Occupational Self-Efficacy; **PA** = Positive Affectivity; **RC** = Role Clarity; **IaW** = Independence at Work.

Cc S E (L)

PA (L)

Role Cla (L)

Indep at
Work (L)

CORRELATIONS: variables for the MULTILEVEL model measured on 143 nurse managers/groups

	VARIABLES (level 2)	MEAN (SD)	1.	2.	
1.	WE (L)	4.15 (0.98)	-		
2.	L. Id (L)	5.05 (1.02)	.31***	-	
* p < .05; ** p < .01; *** p < .001					

	VARIABLES (level 1)	MEAN (SD)	1.	2.	3∙	4.
1.	JS	3.33 (0.33)	-			
2.	TL	4.47 (0.98)	.50***	-		
3.	MW	5.07 (0.54)	.52***	.18***	-	
4.	PA	3.56 (0.24)	.44***	.26***	.40***	-
* p < .05; ** p < .01; *** p < .001						

Note. **WE** (L) = Work Engagement (of the leader); L. Id (L) = Leader Identity (of the leader). **JS** = Job Satisfaction; TL = Transformational Leadership; **MW** = Meaningful Work; **PA** = Positive Affectivity.

THE MULTILEVEL MODEL

Performed with Mplus 8.

$$ICC(1)$$
 for $JS = .07$

Indirect effects

WE \rightarrow JS = .130*

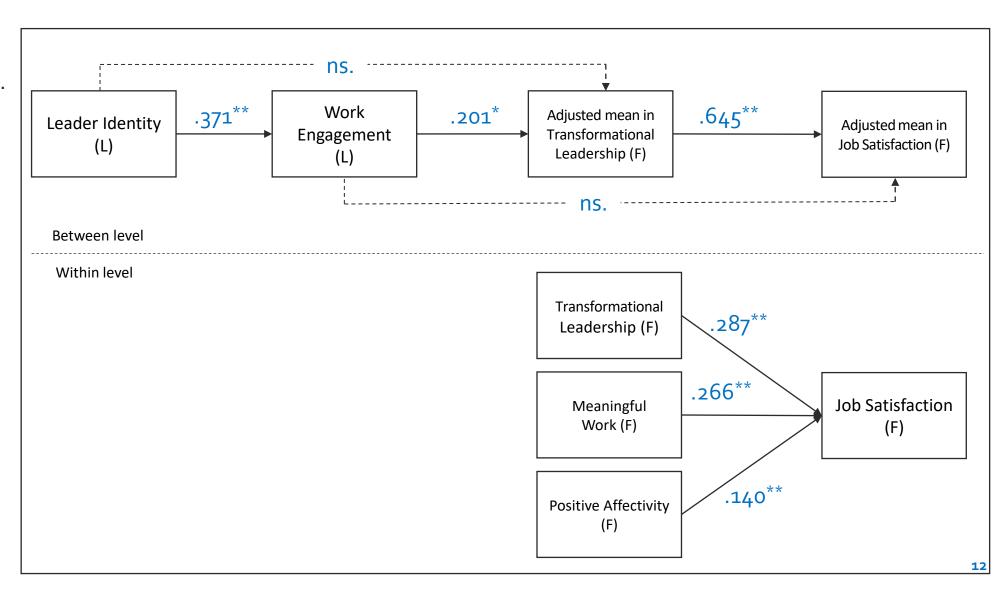
L.Id \rightarrow TL = .075 *

L.Id. \rightarrow JS =.048 ns.

R-square

Within \rightarrow JS = .203 ** Between \rightarrow JS = .431 **

* p < .05; ** p < .01; *** p < .001



DISCUSSION

The table summarizes the study hypotheses and their outcomes:

HP.	DESCRIPTION	OUTCOME
Hp. 1	LEADER IDENTITY (L) > WORK ENGAGEMENT (L)	CONFIRMED
Hp. 2	LEADER IDENTITY (L) > WORK ENGAGEMENT (L) > the perception of TRASFORMATIONAL LEADERSHIP (F)	CONFIRMED with the mediation of WE(L)
Нр. 3	WORK ENGAGEMENT (L) > the perception of TRASFORMATIONAL LEADERSHIP (F) > JOB SATISFACTION (F)	CONFIRMED with the mediation of TL(F)

THEORETICAL IMPLICATIONS

- 1. Leader identity can be defined, and operates, as a personal resource for leaders:
 - ✓ Considering <u>leader identity theory</u>, this finding paves the way to investigating outcomes which are not directly connected to leadership and its development (Day & Harrison, 2007; Lord, Gatti, & Chui, 2016; Zheng & Muir, 2015) but, for instance, to employees' well-being at work;
 - ✓ Considering <u>JD-R theory</u>, it will be interesting to investigate whether other identity dimensions (e.g., professional identity and follower identity) do function as personal resources.
- 2. In this study, the leader transfers his/her well-being perceptions to the followers: the **crossover model** thus shows its usefulness in investigating how the influence from the leader to the followers' team can be exerted (Gutermann et al., 2017). The entire chain of mediation (from L.Id. to JS) seems interesting: even though the direct and indirect total effects are not significant (the latter, however, p = .064), it not only provides us with a model for investigating **crossover**, but also shows a possible **antecedent** of this transfer (i.e. L.Id.), thus suggesting an approach for developing the crossover theory (Westman, 2001).

PRACTICAL IMPLICATIONS

The study confirms the value and usefulness of developing measures that can support **leaders** in healthcare settings, considering the "virtuous circle" that they activate with their work teams.





The study thus has practical implications for **leader identity**, a dimension that can increase leaders' work engagement and, indirectly, through a better perception of leadership, work teams' **job satisfaction**.

It would be helpful to invest in **transformational leadership** (Cummings et al., 2010; Utriainen et al., 2015) through training measures designed specifically for the healthcare sector.





In healthcare, it would thus be important to **support and develop supervisors' leader identity**, by <u>formal legitimation</u> of nurse leaders, and providing individualized <u>coaching</u> programs or <u>leadership</u> <u>development interventions</u>.

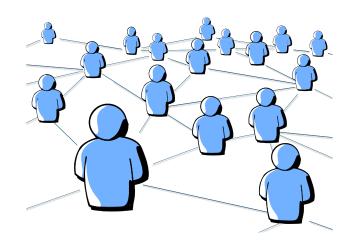
LIMITATIONS

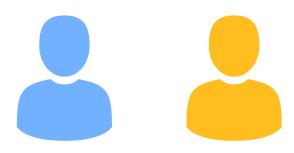
- 1. As the ICC value measured on followers is lower than .05 for WE, we were unable to investigate the direct crossover of motivation from the leader to their teams, and thus we could not draw a parallel between this model and the one on JS.
- 2. The **short scale used to measure transformational leadership** did not allow us to test specific hypotheses regarding the sub-dimensions of this leadership style which could result in a stronger crossover and have different impacts on different outcomes.
- 3. The multilevel model described in this study is very specific and, in a certain sense, a bit narrow, especially in the part that investigates crossover.

FUTURE DEVELOPMENTS

We would like to propose two developments, the former linked to identity and the latter to crossover:

1. Considering that positive identities can develop social resources, a capability which is also mentioned for personal resources, it would be interesting to test a model that measures the association of leader identity with the strength of the leader's network (see Kwok et al., 2018). This would enable us to determine whether the latter crosses over to followers in the leader's team or if it increases the team's well-being at work. This could be another way to test a model that leads us to define leader identity as a personal resource.





2. Considering the crossover model's explicit mention of dyads – as well as groups and individuals – and the dyadic nature of leadership, it would be interesting to test the model used in this study on leader/follower dyads, so as to be able to reflect on the levels at which crossover can operate and influence can be enacted.

REFERENCES

- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. Journal of Management Inquiry, 9(2), 134-145.
- Bakker, A. B., & Demerouti, E. (2017). Job demands—resources theory: taking stock and looking forward. Journal of Occupational Health Psychology, 22(3), 273-285.
- Barbuto Jr, J. E. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. Journal of Leadership & Organizational Studies, 11(4), 26-40.
- Carless, S.A., Wearing, A.J., & Mann, L. A. (2000). Short measure of transformational leadership. Journal of Business and Psychology, 14(3), 389–405.
- Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., Muise, M., & Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363-385.
- Damen, F., Van Knippenberg, D., & Van Knippenberg, B. (2008). Leader affective displays and attributions of charisma: The role of arousal. *Journal of Applied Social Psychology*, 38(10), 2594-2614.
- Day, D. V., & Harrison, M. M. (2007). A multilevel, identity-based approach to leadership development. Human Resource Management Review, 17(4), 360-373.
- Dutton, J. E., Roberts, L. M., & Bednar, J. (2010). Pathways for positive identity construction at work: Four types of positive identity and the building of social resources.

 **Academy of Management Review, 35(2), 265-293.
- Gutermann, D., Lehmann-Willenbrock, N., Boer, D., Born, M., & Voelpel, S. C. (2017). How leaders affect followers' work engagement and performance: Integrating leader– member exchange and crossover theory. *British Journal of Management*, 28(2), 299-314.
- Hiller, N. J. (2005). An examination of leadership beliefs and leadership self-identity: Constructs, correlates, and outcomes. [Unpublished doctoral dissertation]. Pennsylvania State University, University Park, PA.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44(3), 513-524.
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences.

 Annual Review of Organizational Psychology and Organizational Behavior, 5, 103-128.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84(3), 632.
- Hollander, E. P., & Julian, J. W. (1969). Contemporary trends in the analysis of leadership processes. *Psychological Bulletin*, 71(5), 387-397.
- Huang, J., Wang, Y., Wu, G., & You, X. (2016). Crossover of burnout from leaders to followers: A longitudinal study. *European Journal of Work and Organizational Psychology*, 25(6), 849-861.
- Kwok, N., Hanig, S., Brown, D. J., & Shen, W. (2018). How leader role identity influences the process of leader emergence: A social network analysis. *The Leadership Quarterly*, 29(6), 648-662.
- Li, Y., Wang, Z., Yang, L. Q., & Liu, S. (2016). The crossover of psychological distress from leaders to subordinates in teams: The role of abusive supervision, psychological capital, and team performance. *Journal of Occupational Health Psychology*, 21(2), 142-153.

REFERENCES (2)

- Lord, R. G., Gatti, P., & Chui, S. L. M. (2016). Social—cognitive, relational, and identity-based approaches to leadership. *Organizational Behavior and Human Decision Processes*, 136(3), 119–134.
- Oyserman, D. (2007). Social identity and self-regulation. In A. Kruglanski & T. Higgins (Eds.), Handbook of social psychology (2nd ed., pp. 432–453). New York, NY: Guilford Press.
- Pejtersen, J. H., Kristensen, T. S., Borg, V., & Bjorner, J. B. (2010). The second version of the Copenhagen Psychosocial Questionnaire. *Scandinavian Journal of Public Health*, 38(3_suppl), 8-24.
- Rigotti, T., Schyns, B., & Mohr, G. (2008). A short version of the occupational self-efficacy scale: Structural and construct validity across five countries. *Journal of Career Assessment*, 16(2), 238-255.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716.
- Shamir, B. (1991). Meaning, self and motivation in organizations. Organization Studies, 12(3), 405-424.
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). Journal of Career Assessment, 20(3), 322-337.
- Stein, M., Vincent-Hoeper, S., & Gregersen, S. (2020). Why busy leaders may have exhausted followers: A multilevel perspective on supportive leadership. *Leadership & Organization Development Journal*, 41(6), 829-845.
- Tafvelin, S. (2013). The transformational leadership process: Antecedents, mechanisms, and outcomes in the social services. (Doctoral dissertation, Umeå universitet).
- Ten Brummelhuis, L. L., Haar, J. M., & Roche, M. (2014). Does family life help to be a better leader? A closer look at crossover processes from leaders to followers. *Personnel Psychology*, 67(4), 917-949.
- Utriainen, K., Ala-Mursula, L., & Kyngäs, H. (2015). Hospital nurses' wellbeing at work: A theoretical model. Journal of Nursing Management, 23(6), 736-743.
- van Knippenberg, D. (2012). Social identity-based leadership and the employee—organization relationship. In The Employee-Organization Relationship (pp. 127-154). Routledge.
- Van Quaquebeke, N., Van Knippenberg, D., & Brodbeck, F. C. (2007). The influence of subordinates' self-perceptions on their evaluations of and responses to leaders. *Paper presented at the Academy of Management Annual Meeting*, Philadelphia, USA.
- van Veldhoven, M. J. P. M., Prins, J., Van der Laken, P. A., & Dijkstra, L. (2015). QEEW2.0: 42 short scales for survey research on work, well-being and performance. Amsterdam, NL:SKB.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.
- Westman, M. (2001). Stress and strain crossover. *Human Relations*, 54(6), 717-751.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121-141.
- Zheng, W., & Muir, D. (2015). Embracing leadership: a multi-faceted model of leader identity development. Leadership & Organization Development Journal, 36(6), 630-656.

THANKS FOR LISTENING!!

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